BRUHATH BENGALURU MAHANAGARA PALIKE

MODIFIED ESTIMATE

Name of work: Modified Estimate for the work of Improvements to drains and Asphalting to Medarahalli area and Chikkasandra area in ward no.12 Shettyhalli Sub Division (2 Works Package No: DZ/2017-18(02) (Improvements to Roads and Asphalting to Medarahalli area, Shettyhalli main road to via Railway gate to Medarahalli main road & Chikkasandra area, Bonemill main road in ward no.12 Shettyhalli Sub Division)

Estimated Cost: 250.00 Lakhs

Approved Cost: 277.07 Lakhs

Sl No	Description of Items	No	Length	Width	Depth	Qty	Unit	Rate	Amount
1	Removing B.S slab of drain and stacking (Page No 25., I.no.5.32 of KPWD S.R 2016-17).								
		Not executed							
2	KSRRB M300-14. **Excavation for roadwork in all types of soil** by mechanical means including cutting and loading to tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transportation with a lead of 1.00 km and complete as per specifications MORTH Specificatio MORTH Specification No.301Loading and unloading with 10km lead= (I No-19.14, P No-143)								
	Chikkasandra Main								
		1	502.00	6.20	0.30	933.72			
	Shettyhalli Main Road								
		2	956.00	1.20	0.45	1032.48			
		2	302.00	1.20	0.45	326.16			
	Medarahalli Main Road								
		2	658.00	1.80	0.45	1065.96			
			TOTAL			**3358.32**			
			BOQ QTY			**6859.08**			
			UP TO 125% QTY			**3358.32**	**Cum**	**97.32**	**326831.70**
			ABOVE 125% QTY			-			
3	KSRRB 300-58. Compaction of Original ground with maximum of 6 passes of 8 to 10 tonnes power roller inclunding filling in depression occuring during rolling including cost of all labour, HOM of machinary Complete as per specifitions Morth/ Chapter Page NO 149 Item.No.19.64 of KPWD S.R 2016-17								
	Chikkasandra Main Road								

	Description of Items	No	Length	Width	Depth	Qty	Unit	Rate	Amount
		1	502.00	6.20		3112.40			
	hettyhalli Main Road								
		2	956.00	1.20		2294.40			
		2	302.00	1.20		724.80			
	Medarahalli Main Road								
		2	658.00	1.20		1579.20			
			TOTAL			**7710.80**			
			BOQ QTY			**1504.80**			
			UP TO 125% QTY			**1881.00**	**Sqm**	**5.93**	**11,154.33**
			ABOVE 125% QTY			**5829.80**	**Sqm**	**5.93**	**34,570.71**
4	Construction of Sub Grade and earthen Shoulders with approved material Gravel/Murrum With all Lifts & Leads transporting to site, Spreading Grading to required slope and compacted to meet requirement of Table No.300.2 complete as per specifications (including cost of earth , watering Charges & Compaction by vibratory roller) MORTH Specification No.305 (Page no.148,1 no 19.62 of KPWD S.R 2016-17)								
		Not executed							
5	Construction of **granular sub-base by providing close graded material** mixing in a mechanical mix plant at OMC, Carriage of mixed material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the desired density, complete as per specifications Plant mix method close graded granular sub base material as per 400-1 For grading-II material.. Clause 401 of MORTH V Revision.(I No-20.5,P No-153)								
	Chikkasandra Main Road								
		1	502.00	6.20	0.15	466.86			
	Shettyhalli Main Road								
		2	956.00	1.20	0.15	344.16			
		2	302.00	1.20	0.15	108.72			
	Medarahalli Main Road								
		2	658.00	1.20	0.15	236.88			
			TOTAL			**1156.62**	**Cum**		
			BOQ QTY			**1693.17**	**Cum**		
			UP TO 125% QTY			**1156.62**	**Cum**	**1731.66**	**2002872.59**
			ABOVE 125% QTY			-			

Description of Items	No	Length	Width	Depth	Qty	Unit	Rate	Amount
KSRRB M400-17. Providing, laying, spreading and compacting cushed stone aggregates of granite / trap / basalt to **wet mix macadam** specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed materials by tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications(P.No-155,I No-20.18)								
Chikkasandra Main Road								
	1	502.00	6.20	0.23	715.85			
Shettyhalli Main Road								
	2	956.00	1.20	0.23	527.71			
	2	302.00	1.20	0.23	166.70			
Medarahalli Main Road								
	2	658.00	1.20	0.23	363.22			
		TOTAL			**1773.48**	**Cum**		
		BOQ QTY			**1447.92**	**Cum**		
		UP TO 125% QTY			**1773.48**	**Cum**	**1979.72**	**3511001.74**
		ABOVE 125% QTY			-			
7 KSRRB M500-6. Providing and applying **primer coat** with S.S. bitumen emulsion on prepared surface of granular base such as WMM including cleaning of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per specifications Clause 502 of MORTH V revision(P.No-158,I No-21.6)								
Chikkasandra Main Road								
	1	240.00	6.30		1512.00			
	1	502.00	6.20		3112.40			
	1	106.00	6.50		689.00			
Shettyhalli Main Road								
	1	956.00	8.50		8126.00			
	1	169.50	11.00		1864.50			
Medarahalli Main Road								
	1	658.00	7.80		5132.40			
		TOTAL			**20436.30**	**Sqm**		
		BOQ QTY			**7643.60**	**Sqm**		
		UP TO 125% QTY			**9554.50**	**Sqm**	**30.86**	**294851.87**
		ABOVE 125% QTY			**10881.80**	**Sqm**	**30.86**	**335812.35**

	Description of Items	No	Length	Width	Depth	Qty	Unit	Rate	Amount
	KSRRB 500-1. Cleaning the existing WBM road surface including removing of binding materials and other foreign matter with wire brushes and small picks, sweeping with brooms or soft brushes and finally dusting with old gunny bags and / or compressed air, to receive bituminous treatment including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH specification clause 501								
	Chikkasandra Main Road								
		1	240.00	6.30		1512.00			
		1	502.00	6.20		3112.40			
		1	106.00	6.50		689.00			
	Shettyhalli Main Road								
		1	956.00	8.50		8126.00			
		1	169.50	11.00		1864.50			
	Medarahalli Main Road								
		1	658.00	7.80		5132.40			
			TOTAL			**20436.30**			
			BOQ QTY			**13262.25**	**Sqm**		
			UP TO 125% QTY			**16577.81**	**Sqm**	**3.56**	**59,017.01**
			ABOVE 125% QTY			**3858.49**	**Sqm**	**3.56**	**13,736.22**
9	KSRRB 500-7. Providing and **applying tack coat** using 80/100 grade bitumen(VG10) on the prepared black topped surfaces at 2.5 kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM complete as per specifications (P.No-161,I No-21.7)								
	Chikkasandra Main Road								
		1	240.00	6.30		1512.00			
		1	502.00	6.20		3112.40			
		1	106.00	6.50		689.00			
	Shettyhalli Main Road								
		1	956.00	8.50		8126.00			
		1	169.50	11.00		1864.50			
	Medarahalli Main Road								
		1	658.00	7.80		5132.40			
			TOTAL			**20436.30**			
			BOQ QTY			**25180.00**	**Sqm**		
			UP TO 125% QTY			**20436.30**	**Sqm**	**13.06**	**266898.08**
			ABOVE 125% QTY			-			

Description of Items	No	Length	Width	Depth	Qty	Unit	Rate	Amount
KSRRB M500-11 : Providing and laying bituminous Macamdam on prepared surface with crushed coarse aggregates as design mix for base/binding course including loading of agregates with F.E loader, hot mixing of stone aggregates and bitumen in hot mix plant 40 tonne capacity transporting the mixed material in tipper to paver and laying mixed materials paver finisher to the required level and grade, roo lling by power roller to achieve the desired density but excluding cost of primer / tack coat including lead, lift and cost of all materials, labour HOM of machineries complete as per specifications using TPH capacity HMP with sensor paver Gr-II (50mm to 75mm) with 3.3% VG-30 Bitumen (Page No.162, Item No. 21.11.5 of KPWD S.R 2016-17)								**0.00**
Chikkasandra Main Road								
	1	240.00	6.30	0.05	75.60			
	1	502.00	6.20	0.05	155.62			
	1	106.00	6.50	0.05	34.45			
Shettyhalli Main Road								
	1	956.00	8.50	0.05	406.30			
	1	169.50	11.00	0.05	93.23			
Medarahalli Main Road								
	1	658.00	7.80	0.05	256.62			
		TOTAL			**1021.82**	**Cum**		
		BOQ QTY			**833.60**	**Cum**		
		UP TO 125% QTY			**1021.82**	**Cum**	**6210.95**	**6346441.87**
		ABOVE 125% QTY			-			
KSRRB M500-19. Providing and laying **bituminous concrete** using crushed aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications Clause 507 of MORTH V revision using40/60 TPH capacity H.M.P. with Mechanical Paver Gr-ll (30 mm to 45 mm) with 5.4% VG-30 Bitumen(P.No-162,I No-21.22.6)								
Chikkasandra Main Road								
	1	240.00	6.30	0.04	60.48			
	1	502.00	6.20	0.04	124.50			
	1	106.00	6.50	0.04	27.56			

	Description of Items	No	Length	Width	Depth	Qty	Unit	Rate	Amount
	ettyhalli Main Road								
		1	956.00	8.50	0.04	325.04			
		1	169.50	11.00	0.04	74.58			
	edarahalli Main Road								
		1	658.00	7.80	0.04	205.30			
			TOTAL			817.45			
			BOQ QTY			726.18	Cum		
			UP TO 125% QTY			817.45	Cum	15283.48	12493511.29
			ABOVE 125% QTY			-			
	Add Plastic to Bituminous Concrete 8% of Bitumen								
	8% of the (841.33x8%)	1	817.45	0.08	141.00	9220.86			
			TOTAL			9220.86			
			BOQ QTY			8190.83			
			UP TO 125% QTY			9220.86	Cum	30.23	278746.55
			ABOVE 125% QTY			-			
3	KSRRB M800-13.**Road Marking with Hot Applied Thermoplastic Compound** with Reflectrising Glass Beads on Bituminous Surface/ Concrete Surface: Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35 standards specified. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803(P.No-182,I No-24.15)								
	Chikkasandra Main Road								
		3.0	240.00	0.15		108.00			
		3.0	502.00	0.15		225.90			
		3.0	106.00	0.15		47.70			
	Shettyhalli Main Road								
		3.0	956.00	0.15		430.20			
		3.0	169.50	0.15		76.28			
	Medarahalli Main Road								
		3.0	658.00	0.15		296.10			
			TOTAL			1184.18	Sqm		
			BOQ QTY			1174.91	Sqm		
			UP TO 125% QTY			1184.18	Sqm	607.68	719599.46
			ABOVE 125% QTY			-			

	Description of Items	No	Length	Width	Depth	Qty	Unit	Rate	Amount
	SRRB M800-35. Providing and fixing of road stud 00x 100 mm, die- cast in aluminium, resistant to orrosive effect of salt and grit, fitted with lense eflectors, installed in concrete or asphaltic surface by drilling hole 30 mm upto a depth of 60 mm and bedded in a suitable bituminous grout or epoxy mortar, all as per BS: 873 part 4:1973 complete as per specifications(Page No 189., I.No.24.41 of KPWD S.R 2016-17)								
			Not executed						
5	Refixing B S Slab of Drains and Pointing in C.M (1:30 Page No.25., I.No.5.33 of KPWD S.R.2016-17)								
			Not executed						
	Providing granite Slabs ofSelected quality roughly dressed and fixed in cement mortar (1:6) including fixing curing etc.., Complete (Page No.25., I.No. 5.31 of KPWD S.R 2016-17)								
			Not executed						
7	Lead charges for conveying the excavated earth including loading and unloading upto 10kms as per directions (Page No.140 SL.No.5 of KPWD S.R 2016-17)								
						3358.32			
			TOTAL			3358.32	**Cum**		
			BOQ QTY			**6546.99**	**Cum**		
			UP TO 125% QTY			**3358.32**	**Cum**	**118.69**	**398599.00**
			ABOVE 125% QTY			-			
	Extra Item								
	Stone Dust / Grit 4.75mm to 0.075 mm KSRRB M100-1 Loading and Unloading of Stone Boulder/Stone aggregates/Sand/Kanker/Moorum. Page No.II Sl No.46 of KPWD SR 2016-17								
	Shettyhalli Main Road								
		1	956.00	1.20	0.15	172.08			
		1	174.00	1.80	0.15	46.98			
	Medarahalli Main Road								
		2	658.00	1.20	0.15	236.88			
						455.94	**Cum**	**1336.64**	**609428.50**
	Basic Rate		1000.00						

Description of Items	No	Length	Width	Depth	Qty	Unit	Rate	Amount
Lead Charges (2.5*2.63*10)		133.75						
6% area weightage		60.00						
Total		**1193.75**						
Add TP 11.97%		142.89						
GrandTotal		**1336.64**						
							Sub Total	**27703073.29**
							Miscellaneonus	**4078.29**
							GRAND TOTAL	**27707151.58**

2,77,03,068·94/-

rtificate

he workspot was inspected and works is found to be necessary.
he area comes within the Bruhat Bangalore Mahanagara Palike limits.
he rates adopted based on the PWD SR,for year 2016-2017 and revised estimates rates are Approved rates

Assistant Engineer
Ward No-12
BBMP Bangalore

Asst. Executive Engineer,
Shettyhalli Sub Division
BBMP Bangalore

Executive Engineer,
Dasarahalli Division
BBMP Bangalore

Technically Sanctione for Rs. 277.03 lakhs.
Rs. In words. Two Hundred & Seventy Seven lakhs Three Thousands only
Under S.R. 2190
Job Code No 012-18-0000178 & 012-18-0000182
Registered as CE No. 01/2020-21 subject to conditions contained in Enclosed Memo No CE/DA/TS/01/2020-21 dt 06/07/2020
AE/JE. TA CE(D) 06/07/2020